

AMENDMENTS TO THE CLAIMS

1. (cancelled)
- 2- (Currently amended) A composite product comprised of a layer of polystyrene structural plastic having a 0.1 to about 2.5 mm thin protective layer comprising:
 - a) 10 - 95% polymethyl methacrylate or an C₁-C₆ alkyl methacrylate/C₁-C₈ alkyl acrylate copolymer matrix
 - b) 0 - 60% modifiers; and
 - c) 5 - 40 % acrylic polymer additive that increases the adhesive strength between the layers which is comprised of
 - ~~5-90~~ 20-80% methyl methacrylate,
 - ~~10-95% C₂-C₆ alkyl methacrylate~~ 20-80% butyl methacrylate, and
 - 0 - 15% methacrylic acid, acrylic acid or C₁-C₅ esters thereof.
- 3- (Previously presented) A process for producing a composite of a polystyrene structural plastic and a 0.1 to about 2.5 mm thin protective layer, the process comprises joining a molten stream of polystyrene structural plastic and a molten stream of a blend of an acrylic ester polymer and an acrylic polymeric additive in an extruder discharge conduit to form a single stratified stream of molten material conforming to the cross-section of the conduit and having a relatively sharply defined interface between the structural plastic and the blend, and thereafter passing the stratified stream through a sheet-form extrusion die having its die lips generally aligned with the foregoing interface.
- 4- (cancelled)
- 5- (Currently amended) The composite product of Claim 2 wherein the acrylic polymer additive is comprised of 20-80% methyl methacrylate and 20-80% butyl methacrylate and has a molecular weight from 40,000-300,000.

6- (Previously presented) The composite product of Claim 5 wherein the acrylic polymer additive is comprised of 50- 80% methyl methacrylate and 20-50% butyl methacrylate and has a molecular weight from 40,000-100,000.

7- (Currently amended) A co-extruded product comprised of two layers

- (a) a first layer comprised of polystyrene structural plastic and
- (b) a second layer comprised of
 - (i) methyl methacrylate resin, and
 - (ii) an acrylic polymer additive that increases the adhesive strength between the layers which is comprised of
 - (i) 20-80% methyl methacrylate,
 - (ii) 20-80% butyl methacrylate, and
 - (iii) 0 - 15% methacrylic acid, acrylic acid or C₁-C₅ esters thereof.

8- (Previously presented) The product of Claim 7 wherein the polystyrene structural plastic is a copolymer of acrylonitrile/butadiene/styrene.

9- (Previously presented) The product of Claim 7 wherein the polystyrene is high impact polystyrene or crystalline polystyrene.

10-12 (Cancelled)

13- (Currently amended) The product of claim ~~12~~ 7 wherein ratio of the monomer units is

- (a) 50 to 80 wt% methyl methacrylate,
- (b) 20 to 50 wt% butyl methacrylate and
- (c) 0 to 10 wt% methacrylic acid.

14- (Original) The product of Claim 7 wherein the second layer is comprised of

- (i) 60 to 95 wt % of methylmethacrylate resin and

(ii) 5 to 40 wt % of the acrylic polymer additive.

15- (Original) The product of Claim 7 wherein the first layer contains pigments, dyes, fillers, PS, acrylic and HIPS rework, different grades of HIPS.

16- (Currently amended) A co-extruded product comprised of two layers

(A) 50 to 95 wt % being a first layer comprised of high impact polystyrene, and

(B) 5 to 50 wt % being a second layer being comprised of

(i) 60 to 95 wt % of an acrylate resin, and

(ii) 5 to 40 wt % of an acrylic polymer additive which is copolymer or terpolymer that increases the adhesive strength between the layers which is comprised of

(i) 20-80% methyl methacrylate,

(ii) 20-80% butyl methacrylate, and

(iii) 0 - 15% methacrylic acid, acrylic acid or C₁-C₅ esters thereof.

17- (Original) The product of Claim 16 wherein the acrylic polymer additive is a 50- 80% methyl methacrylate and 20-50% butyl methacrylate polymer having a molecular weight from 40,000-300,000.

18- (Currently amended) The product of Claim 16 wherein the acrylic polymer additive is a 20-50 % methyl methacrylate and 50-80% butyl methacrylate having a molecular weight from 40,000-300,000, preferably 40,000-100,000.

19- (cancelled)